

ADDRESS

DELIVERED AT THE

Opening of the Medical Classes

IN THE

UNIVERSITY OF GLASGOW,

ON TUESDAY, OCTOBER 25, 1887.

BY

PIERCE ADOLPHUS SIMPSON, M.A., CANTAB., M.D.,
REGIUS PROFESSOR OF FORENSIC MEDICINE.



Glasgow:

C. L. WRIGHT, 100-102 WEST GEORGE STREET,
AND 102 STIRLING ROAD.

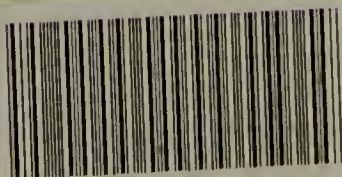
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ADDRESS.

GENTLEMEN,—I have been entrusted by the Medical Faculty with the pleasing task, on behalf of my colleagues and myself, of bidding you a most cordial welcome to the Medical School of this ancient University ; and of wishing you happiness and success in the prosecution of your studies. We regard you all as friends, some as new, some as old, but all as friends alike, in whose future welfare we take a deep and lasting interest, and whose success in life we endeavour to promote as a father does that of his child. As the bud is to the flower, so is your present enjoyment of youth to the full blossom of honourable old age which we trust is in store for you ; and while we by no means grudge you the energy, the vivacity, the lofty aspirations of those earlier years, which for us have passed away, we would have you remember that

“ Youth what man’s age is like to be doth show,
We may our end by our beginning know,”

or as the French proverb puts it—“ *L’homme est toujours l’enfant, et l’enfant toujours l’homme.*”

Yours is the spring-time of life, neither scorched by summer heats nor chilled by winter frosts, while we, your seniors, must be content with, and grateful for.

the more sombre tints of autumn. As seasons come and go so rapidly, it is but natural to overlook the march of time, and while we are apt "to see Time's furrows on another's brow, how few themselves in that just mirror see." As your years increase you will have many reminders that you are no longer young as formerly, and you will look back on your college days with wistful eyes, and with regret that you cannot spend them once again amidst the friends of your youth, and all its pleasant associations. And should you fail to notice, or should you actually escape the silvery hairs and crow-foot wrinkles unknown to youth, you will be confronted with milestones on the road of life, which will stand out in bold relief, reminding you that when a few more such have been passed, the end of your journey will be near at hand.

It is now my lot—and I am grateful for it—to have reached such a milestone; for thirteen years have passed away since—as promoter for the year, and on behalf of the Medical Faculty, I addressed some words of welcome and encouragement to your predecessors at the commencement of a Winter Session. Thirteen years may seem to some as but a little while, and yet they amount to one-sixth part of even a very long life-time. Many are the changes which have taken place during these few years. Some of those I addressed in 1874 have long since joined the ranks of the great majority, having fallen victims to that dire enemy, disease, which they had devoted their lives to combat. Others have already attained to high professional success, thereby gladdening the heart of their old mother at Gilmorehill. That Alma Mater

herself, too, has undergone many changes, causing an overflow in one case of grief, and in another case of gladness. She has lost the services of no less than nine distinguished teachers of whom she was justly proud, and whose faces were so familiar to us only 13 years ago.

We are a far larger family now than we were in 1873-4. In that year there were 1333 matriculated students, while during the year 1886-7 the number amounted to 2255. When a family increases by such rapid strides it is usual to flit to more commodious premises, and although our present circumstances will not admit of this, we have been able—thanks to generous and valued friends—to make many modern improvements in our house at Gilmorehill, which were sadly wanting, even in 1873. We have now this noble hall, the gift of a Scottish nobleman, who, noble in more ways than in name, magnanimously expressed his sympathy with our Alma Mater by a donation of £45,000. The Randolph Hall is a fitting companion to the magnificent gift of the Marquis of Bute, and adds one more to the many debts of gratitude which the University owes to the merchant princes of this great city of Glasgow.

For many years we had realised as a blank in our University the want of a suitable *locale* wherein students might feel themselves at home, and where they would have facilities for discussing professional and other topics with comfort to themselves, and with benefit to the University. This is a defect more keenly felt in Scottish than in English University life; as the undergraduates south of the Tweed, by

living for the most part within the college walls, have ample opportunities for that healthy, social intercourse which is so calculated to lessen self-conceit, to encourage mutual forbearance, and to mould and prepare the character for overcoming the rough trials of future years. But, by the noble munificence of an old medical graduate of our University, we have now a Students' Union which will supply this long-felt want; and, under the prudent management of the students themselves, a really laudable scheme of Home Rule will be established, which will serve not only to maintain the integrity of the "Union," but which will be a source of satisfaction to every member of the Senatus.

As you enter our University grounds by the north-east gateway, you cannot but notice a quaint and ornate structure which was not there 13 years ago. Neither in respect of age or architecture does it seem to have any sympathy with the noble edifice erected by Gilbert Scott, and yet the bond of union between them is of the nearest and dearest kind. By the generosity of Sir William Pearce, at an outlay on his part of £5000, you are reminded that our University at Gilmorehill is no *parvenue*, but a veteran institution with a noble life-history of more than four hundred years. The march of civilization forced her to change her abode, but we have thus been able to save from destruction a relic of the dear, old, soot-begrimed home, which will serve to awaken for long years to come the fond memories of old college-days in the minds of those who so often passed beneath its portal.

Shortly after passing this old landmark you will notice a new structure of which we cannot boast. It is built of iron, and in architectural design it is disgustingly simple. I often wonder what strangers conceive to be the exact mission in life of this curious structure. It resembles an overgrown water-tank, which might indeed be useful on board ship (although somewhat clumsy even there), but which is wholly unworthy of, and unsuited for the growing requirements of a great anatomical school. I live in hope that this huge tank may at all events serve one good purpose, by drawing the attention of the public of Glasgow to the pressing need which we at present experience for an extension of the buildings of the anatomical department, so as to bring them on a par with those of other medical schools throughout the country ; and thus to remedy the great disadvantages from which we suffer at present, owing to want of room.

We have for a long time served as a living example of the man who began to build a tower and was unable to finish it, and the beauty of our University buildings has thereby, hitherto, been greatly curtailed. This was not wholly our fault—we had the will, but we had not the ways and means. These have now happily made their appearance, and not only may we soon expect to see completed the summit of our hopes in this direction, but also it may be to hear an harmonious peal of bells, in the place of that croaking cymbal which is now wont to summon us to our class-rooms at Gilmorehill.

In 1874 an event occurred, pregnant with hopes of the greatest importance for this University ; for, about the close of that year the Western Infirmary was born.

It is now 13 years of age, and not only has it increased in stature during that period, but, as far as my experience goes, there is not to be found—either in America, Canada, or on the continent of Europe—a similar institution which is better organised, more efficiently managed, or in which—in proportion to its size—more satisfactory surgical and medical results are obtained. Clinical teaching—like every other human institution—may still, and doubtless does, lack perfection ; but I venture to say that in no branch of professional study has improvement been more marked during recent years than in that of clinical work ; and that nowhere is that advance more marked than in the wards of the Western Infirmary.

Such are some of the improvements which have been made in our University home during the last 13 years, and were I to linger on them, they would furnish an ample theme for the few words which it is my pleasing duty to address to you. But just as sight is best appreciated by him who previously had it not, so can I assure you that you would better appreciate your present advantages could you have shared in the disadvantages of your predecessors.

In casting about in my mind for some subject which might interest you, I have encountered a preliminary difficulty, in the fact that in every few years introductory addresses have completely covered the ground which is allotted to me to tread, and I thus run the serious risk—nay, I thus incur the certainty—of walking in the footsteps of swifter and abler feet than mine. An eminent divine, on being twitted by a member of his congregation for having preached

a sermon which he had delivered only a short time previously, replied: "Yes, and I intend repeating the same sermon over and over again until I see my precepts carried into practice." This might or might not be a wise plan for a teacher of divinity, but it is not one which could commend itself to a promoter of a medical school at the beginning of a winter session. In nearly every introductory address which I have read for some time past, when our profession—like every other profession—is being overstocked, reference has been made to the remark of Mr. Abernethy, the famous teacher of surgery at St. Bartholomew's, who, on coming to deliver his first lecture in a new class-room which was filled to the door, exclaimed: "Good gracious, gentlemen, what is to become of you all?" This is a far more burning question at the present day than it was in Abernethy's time, and it may be impertinent on my part to help you to answer it, seeing that already so many solutions have been suggested. But as all of you must ere very long solve the riddle for yourselves, and as on the solution of it in each case hangs, in a great degree, the success or failure of your professional life, it appeared to me that a brief review of the various channels which are open to medical graduates when they emerge from their Alma Mater, might not be wholly devoid of interest to you.

Before, however, making choice of one of these channels, there is a preliminary step, the importance of which I cannot too strongly urge upon every newly-made medical graduate, namely, that he should endeavour to obtain an appointment as house surgeon or resident medical officer to some town or county

Hospital, or Infirmary, or Dispensary for six months at least, or for a longer period if possible ; so that his young shoulders may in safety feel the weight and responsibility of the treatment of disease, guided by the older heads and more trained hands of those whose experience is greater than his own. This training will give the young practitioner an amount of confidence in the work of his profession which he is unlikely—at that early stage—to obtain in any other way, and to which he will look back with gratitude for the rest of his life. The salaries attached to these appointments range from £60 to £120, with apartments, board, coal, gas and attendance.

Walks of Medical Life.—In alluding to some of the various walks of medical life open to graduates, I shall have to enter into the question of emolument, for it is one which no young professional man can afford to ignore unless he enters life with independent means, a state of matters which is exceedingly unusual in our profession. Medical men—like other men—must live, and living now-a-days involves more outlay and expenditure than it did in the days of our grandfathers. But here I must guard myself against the possibility of being misunderstood. Our profession is not one in which the realization of a fortune is to be looked for. A fair competency is all that can be expected, and the prize to be won in the medical calling does not consist of bank-notes, but in the inward satisfaction of having to some extent contributed to the extension of medical knowledge, as well as to the alleviation of human suffering. I would even go

much further than this. Should any of you, unhappily, have entered upon your professional studies regarding your future work as a mere trade in which monetary success is the guerdon coveted in return for your labour; to such I would say, lose not an hour; pack up your medical library and sell it to the highest bidder, and betake yourself to any trade or handicraft, however humble, in which your monetary aspirations may or may not be realised. In this way our noble profession will not be debased by followers whose mistaken notions of medical work could lead to nothing save disappointment to themselves, and bring obloquy upon a calling so entirely unsuited to them.

Assuming, then, that you recognise the pursuit of science and the relief of suffering humanity as your main aim and highest reward in entering your profession, it will be quite justifiable to take into minor account its financial aspect.

Public Services.—There is one outlet in professional life which many medical men elect to follow, and which may already have occupied the attention of some whom I now address. I refer to the public services of the Navy and the Army. Before making such a choice, or, indeed, any choice of a future path in life, there is need of much deliberation and careful weighing of the *pros* and *cons*; for, when once that choice is made, it may be very inconvenient or difficult to alter it. In the public services the young doctor's income is secure from the outset, and, although it is small in amount, it is sufficient for all his ordinary

wants ; and certainly in excess of what he might look forward to in private practice, till after the lapse of many years of anxious work and tedious toil. In the public services, too, he will be comparatively free from care, and he will have plenty of leisure, which, if he be wise, he may partly devote to professional study and research. But, on the other hand, he must remember that he will never be his own master, and that he must always expect to find his hands so tied down by red tape, as to cause mental irritation, to which he dare not give expression. Moreover, his income will not increase commensurately with his years, or as he might reasonably expect it to do in private practice ; and, on retiring from the service at the age of 40 or 50 he must either spend the rest of his life in the endeavour to make the two ends meet, or else he must (although he seldom does) adopt the alternative of commencing the drudgery of professional work in civil life. But, supposing the decision is made in favour of one of the public services, which service is it to be ? To obtain a commission as surgeon in Her Majesty's Services, whether in the Army at home, the Indian Army, or the Royal Navy, the candidate must be doubly qualified and registered, of sound bodily health and of good moral character. He must not be over 28 years of age, unless in the case of the army he enters for service on the West Coast of Africa. He must pass a competitive examination in anatomy, physiology, medicine including therapeutics, the diseases of women and children, surgery including operations upon the dead body and the application of apparatus, chemistry and pharmacy, with

a practical knowledge of drugs. The competitors are arranged according to merit after passing the examination, and the selection of candidates is made accordingly. Successful candidates for the Army and for the Indian Medical Service then undergo a course of study of not less than 4 months at Netley, upon hygiene, clinical and military medicine, clinical and military surgery, pathology of diseases and injuries incident to military service. The "Surgeon on Probation" for the home service, on leaving Netley, gets his commission as Surgeon, with a pay of £200 per annum. The "Surgeon on promotion" for the Indian Medical Service, on leaving Netley, gets his commission as Surgeon, with a pay of 10 shillings a day, and on arriving in India, his pay is 286 rs. per month. Successful candidates for the Navy go to Haslar Hospital for the study of hygiene, and for hospital work; and on leaving Haslar get their commission as Surgeons, with a pay of 11/6 per day. The details as to pay, retiring allowances, &c., in each of these services are set forth in the appendix to this address, a copy of which I would ask you to carry away with you as a slight *souvenir* of to-day.

The Naval Service.—Of these services the Royal Navy stands first in order of precedence. Not many years ago the Navy did not hold out many inducements to medical men, and was deservedly regarded by them as a most unpopular service; but the Naval Authorities, having favourably considered the remonstrances made to them by the medical profession, the naval surgeon of to-day occupies a highly honourable position, and one which

befits an educated gentleman. He spends a healthy and a happy life, surrounded by genial comrades, and he enjoys the privilege of relative rank in common with his fellow officers, depending on his length of service and other circumstances. The delights of foreign travel in every quarter of our world, (since the sun never sets out of sight of Her Majesty's dominions) make up for the unavoidable drawbacks of ship-life, while the naval surgeon's purse—although never over full—is spared those constant appeals which are so painfully known to us who live on land. Sea sharks, doubtless, are ugly customers, but you can keep out of their way; land sharks are as deadly and numerous, but it is difficult to avoid them. During time of peace the lack of a due amount of stimulating professional work is no doubt a drawback to the naval surgeon, especially as serious cases are apt to be drafted into a naval hospital on the first opportunity; but not only may the leisure on board ship be advantageously utilized by professional study, but the naval medical officer when on shore may devote himself to clinical work in some hospital, or attend some of those post-graduate courses which are now so common, should such an opportunity offer itself. Of course to a “life on the ocean wave, and a home on the rolling deep” are denied the softer influences of domestic life, for nothing could be more undesirable than married life under such divided (I had almost said divorced) conditions; but perhaps after all, the knowledge of the world and of human life which is to be gained by a few years at sea in Her Majesty's service, may prove a useful training, not only for the good husband, but also for the useful citizen.

Army Medical Department. — The Army Medical Department, although junior to that in the sister service, is one of which the medical profession may be (and I trust will always have reason to be) equally, as well as justly, proud;—proud, by reason of the self-sacrificing devotion and heroic deeds of her sons, whether in the field of battle, or in the equally deadly field of epidemic disease—whether under a tropical sun, or in the icy regions of northern climes. The Army Medical service has generally hitherto been a popular one with young men entering upon professional life, and during a long series of years it has attracted to its ranks many of the brightest ornaments of our greatest medical schools. I deeply regret to say that owing to circumstances which have recently taken place, the Army Medical service is not one which young medical men can at present be advised to join. With the ostensible object of improving that service, it has from time to time been subjected to an amount of War Office tinkering, which has unsettled the position of its medical officers, and on many occasions so degraded that position as to render it in every way an undesirable one. I may here remind you that up till the promulgation of the last War Office warrant on 1st January, 1887, there were three kinds of rank in the British Army, viz., substantive rank, which is held by every combatant officer, whether commissioned or non-commissioned, from a field-marshal to a corporal; honorary rank, to which all the branches of the service (with the all but total exception of the medical one) could attain to; and lastly, relative rank, which practically was the only rank granted to medical officers in the army. Relative rank meant this:

the army surgeon on leaving Netley ranked, *quâ* precedence, as a captain—the surgeon-major ranked as a major, and after 20 years' service as a lieutenant-colonel—the brigade surgeon as lieutenant-colonel—the deputy-surgeon-general as colonel—the surgeon-general and the director-general as major-general. This relative rank conferred upon medical officers that position to which, in common with their combatant colleagues, their term of service and education justly entitled them. I say justly entitled them, because if looking only to the important duties which they perform even in times of peace, and still more to the dangers to which they are constantly exposed on the battle-field, they well deserved that recognition as regards relative rank which, as far as I know, was ungrudgingly acquiesced in by their comrades. To take a recent example: the experience gained in the Zulu war showed that (call them non-combatant as you please) medical officers have to bear all the dangers connected with active warfare just as combatant officers, and in addition they have to meet dangers which combatant officers do not share. That is a fact which is often lost sight of. The dangers to which medical officers are exposed are greater, because they have to face the assassin who strikes in the dark; they have to face the plagues, dysentery, fevers, and all the evils belonging thereto: they have to stand between the living and the dead; and they cannot desert their posts in consequence of illness, though they can send combatant officers to healthier places. This is well shown in the list of deaths in the Army Medical service since the commencement of that same Zulu war, which show that 85 surgeons have fallen, either on the field of

battle, or from disease or wounds contracted in active service. The records of our army when in active service in the past teems with instances on the part of the army surgeon not only of sublime devotion to professional duty up to the last moment of his life, but also where combatant duties were nobly performed, when these were unavoidably forced upon him. On the many battlefields of Flanders, beneath the burning sun of Spain, in the valley of Inkerman, in the well of Cawnpore, on the inglorious hill of Majuba, there, side by side with their brethren in arms, sleeping the last sleep of the brave, lie the army surgeons of Great Britain. They marched, and conquered, and fell with their comrades; alike in bravery and honour, alike in suffering and privation, and to each alike the laurel wreath is due. It was not a combatant officer, but a military surgeon (Dr. Brydon) whom Sale saw ride in through the gates of Jellallabad, apparently on the point of death from hunger, exhaustion, and fatigue, the survivor of Keith's Army of Afghanistan. It was the same Dr. Brydon who in after years was one of that small but heroic band, whose fame will live as long as the glory of their country, and who, behind the frail walls of the Lucknow Residency, kept the rebel hordes at bay, and saved the honour of our countrywomen and of our country.

The War Office "tinkering" to which I have alluded has manifested itself in the shape of several warrants issued from time to time, some of them conferring privileges, and others taking these away. The privileges were generally granted when the number of candidates fell greatly below the requirements of the medical service, and as soon as that service was amply recruited, another

warrant usually swept away the recently accorded privileges. Take first the famous warrant of 1858—known as Lord Herbert's warrant—which was the outcome of the inquiry by a Royal Commission into the health of the army after the Crimean war. This warrant, in all its important provisions, had but a short life. Many of the privileges which it conferred upon the medical officers were gradually taken away, especially those which had reference to position and rank in the service. As a consequence of this, the fair supply of candidates who came into the service after the re-organization of 1858 was made public, gradually fell off, and the authorities were obliged to consider what steps should be taken in order to meet this failing supply. Then came Admiral Milne's Committee, and out of that sprang another warrant, with another re-organization of the Department. This warrant did not by any means restore the whole of the privileges which, granted by the warrant of 1858, had been subsequently taken away, and the result was that it did not satisfy either the service or the profession generally.

Next came the "unification warrant" of 1873, whereby medical officers were removed to some extent (indeed, subsequently, they were removed altogether) from their regiments, and they were allowed to retire after a short service of ten years, while a premium was offered to induce young professional men to enter the service. This "unification warrant" proved a failure; it was not acceptable to the profession, and it was found to be impossible under its conditions to recruit the service with efficient candidates. This state of matters led to a further re-organization in 1876, when another re-

port was published, and a new warrant was promulgated, granting somewhat better conditions, and restoring continuous service to the medical department. But even this warrant did not bring in the required number of candidates, and did not give the public service the indispensable requirement of a medical staff adequate in numbers and efficiency. In 1879 a further warrant was published, which has been in force up to a recent time. By this warrant of 1879 confidence and contentment were to a great extent restored to the service, and an ample supply of high-class candidates has ever since been at the command of the State. Surely with a contented public and a contented profession, the War Office likewise might have been content. But even yet it "was not happy." No; the tinker was secretly hard at work towards the end of last year, and his latest production was made public on 1st January, 1887, in the shape of a new warrant, whereby the medical officers of Her Majesty's service have, by one fell sweep, been stripped of their military position, and left in the pitiable condition of well-dressed "camp-followers." In other words, their "relative rank" has been abolished. The Secretary for War (Mr. Stanhope) has expressed his belief that "relative rank" meant nothing, and that its abolition leaves the medical officer exactly in the same position that he previously occupied—on the principle, I suppose, that if you take nothing from nothing, nothing still remains. He therefore regards this grievance of the army medical officers as a purely sentimental one, and one for which there is no call for redress. The Secretary for War considers his opinion to be strengthened by the fact that he has not received any direct remon-

strance from the members of the medical staff. I really cannot believe that Mr. Secretary Stanhope seriously advances this negative evidence as of any value in support of his views. Is it conceivable that the subordinates of any public service (the Army Medical service for example) would rise in arms against their superiors, and publicly denounce them as violators of contract and of good faith, and as enemies to the welfare of that service? But nevertheless such is the verdict given throughout the length and breadth of the profession—a verdict of necessity spoken in a whisper by the present members of the medical staff, but loudly proclaimed on the housetops by veteran medical officers, who, having retired from the service, are no longer tongue-tied through fear of the powers that be in high places. That verdict declares the abolition of “relative rank” to be one of the most disastrous blows ever dealt against the Army Medical service, and it is a verdict which is being approved of in a very practical way by the various medical schools of Great Britain, in the interests of their graduates. Until, then, this obnoxious warrant has been rescinded, and the medical officer reinstated in that position to which his education and important duties entitle him to, I would earnestly warn medical graduates against joining the Army Medical service; feeling sure (as I do) that stopping the supplies will afford the surest and quickest remedy for this latest and most vexatious grievance of the Army Medical staff.

Private Practice at Home and Abroad.—Undoubtedly the largest field for medical labour, and the one

which will always enlist the greatest number of followers, is civil practice either at home or abroad, whether men prefer to practise as specialists or as general practitioners. The advance of medical science within our own times has been so rapid and so great, owing to the ever-increasing number of earnest workers and their careful records of the facts which they have observed, that it is quite impossible for any man now-a-days to attain to excellence in every branch of medical practice. This being so, it is in the interest of the public, as well as of the profession, that many men should become specialists, devoting their whole time and energy to the study of the diseases to which one organ or one set of organs is liable; and so should thus acquire a proficiency in the treatment of those diseases to which the general practitioner cannot expect to attain. The choice between specialism and general practice is to be made by each man according to his individual bias; though none should forget that the specialist will probably have much more time on his hands during the earlier years of his professional life than he who engages in general practice. This choice, however, need not be, and, indeed, seldom is made at the outset. More frequently a man occupies himself at first as a general practitioner, and then—after a longer or shorter period—he decides whether he will continue to attend to all the natural (or unnatural) shocks that flesh is heir to, or else become a specialist for the treatment of a limited number of them. For him who decides on private practice as his line of professional life, there is another matter quite as important as the one to which I have just now alluded. I refer to the question of abode. Whether is a medical

man commeneing life to east his lot in the eountry, or in a town ; at home, or abroad ? This question ean only be settled by having regard to various eonsiderations. In eountry praetiee the labourers are eomparatively few and the work is often very hard, involving long journeys by night as well as by day ; whereas in town praetiee the labourers are frequently so numerous that not a few of them find their duties less arduous than they would wish them to be. The desire to be near relations or friends, or both, will often overrule all other eonsiderations in the seleetion of a loeality. But here let me guard you against the not unnatural fallaey that as soon as you settle in praetice, all your relations and friends will fly to you for advice, whenever the state of their health renders adviee necessary. They may not say it to you in so many words, but they will show by their deeds that they prefer your “trying your hand” upon some one else before entrusting the care of their bodies to your (as they believe) untrained hands. Again, the question of loeality may be influeneed by climatic eonsiderations. Some men would like to spend their lives in such balmy air as that of Devonshire, or the Isle of Wight, while others, seorning such effeminate surroundings, would prefer to begin and end their days near John o’ Groat’s or in the Hebrides. It may interest those who have deeided on settling down in praetiee at home, to note in the Tables which I now show you, the population as gathered from the census of 1881, as well as the number of medieal praetitioners in eae of the priniepal towns in England and Seotland in that year. These Tables will also indicate the population of the

United Kingdom and its divisions as ascertained by the censuses of 1851, 1861, 1871, 1881, and the proportions of medical men to the population.

It is difficult to decide as to the proper proportion of medical men to the population. In the army there is a surgeon to every 204 men, or 49 to 10,000. The civil population have not one-sixth part of this number. It is impossible to accept the army as affording any fair basis for even an approximate conclusion. The analogy of the army is fallacious, because the supply in the army is based on a calculation of extraordinary contingencies, which are not taken into account in civil life. Nor can we lay down any hard and fast line for the United Kingdom which would be applicable for each of its divisions, nor a hard and fast line for any of the divisions which would be applicable to all the counties, nor for the counties which would be applicable to the towns and villages and country districts, nor for any large town which would be applicable to more than a few of the other large towns. The subject is of a decidedly complex character. In order even to arrive at the actual facts of the case as it stands at present more information is required. We must add to the number of medical men the number of practising unqualified assistants and counter-prescribing chemists, and these two classes are an unknown quantity, whose absence from the calculation would vitiate the conclusion which we wish to draw. We want to ascertain, at least approximately, what proportion of medical men is an adequate one for supplying the wants of the population under ordinary circumstances,

and it is doubtful whether we are at present in a position to settle the question. All that we can do with the data before us is to calculate the actual proportion of qualified medical men to the population in each division of the kingdom. If we turn to the various towns, and villages, and districts in the different divisions of the kingdom, we find the greatest anomalies prevailing in the distribution of medical men and in their proportion to the population; so much so that no safe general statement can be made until the circumstances of each individual district, town, and village have been investigated, and until it has been ascertained, by inspection and inquiry, whether the medical attendance in each and all is sufficient or insufficient, and if insufficient, what are the causes of the insufficiency. The proportion of medical men to the population in various localities is influenced by various circumstances such as these, viz. :—

(1.) Fashionable sea-side towns and inland watering places having a migratory population, or a considerable number from the upper classes of society, as ordinary residents, or as invalid visitors, will have a large proportion of medical men to the population.

(2.) Towns with a large manufacturing interest and numerous factories, employing hundreds and thousands of operatives, and mining districts, will have a small proportion of medical men to the population.

(3.) Decaying towns, out-of-the-way places, country districts, with a poor and scattered population, difficult

of access, will probably have a small proportion of medical men.

(4.) Villages in more civilised parts of the country, districts where there are many small farmers, and where there is a chance of getting practice out of neighbouring villages and small towns, and where club appointments are to be obtained, will probably have a large proportion of medical men to the population.

Exceptions may, of course, be found to all such general statements, and the averages may lead to fallacious conclusions from various causes which do not appear upon the face of the figures.

The increase in the number of medical practitioners since 1881 is very great—amounting in the present year to 2021 in England and Wales; 814 in Scotland; and 1847 in Ireland; or a total increase of 4682 in the United Kingdom. Nor would it be difficult to assign a reason for this. During the last few years there has been an unprecedented amount of depression in trade all the world over, which, unhappily, still continues; and while this depression lasts, men flock in abnormal numbers to the medical and other professions, as affording them a better chance in the battle of life than commerce can, meanwhile, hold out to them. The merchant attributes the bad times to “over-production,” and this assuredly points a moral to the young medical graduate in quest of a suitable locality for his future home. If he would avoid that medical congestion to which I have alluded, and as to the existence of which there cannot be any doubt, I would

suggest that in most of our Colonies he would find a sphere of usefulness much larger than is, at the present time, to be found at home.

The extent of this vast colonial territory, subject to the British Crown, is indeed enormous. For instance, Canada, stretching as it does from the Atlantic to the Pacific, has an area of 3,620,500 square miles, almost as large as that of Europe, with a population of 4,550,000.

In the vast number of islands which lie between the Pacific and Indian Oceans, and which go under the name of Australasia, the British territory has an area of 3,181,344 square miles, and a population of 3,000,000.

The British possessions in the West Indies have an area of 13,750 square miles, with a population of 1,250,000; and the British territory in Africa extends to 240,110 square miles, with a population of 2,249,824.

In calling attention to the Colonies as a field for medical practice, I must qualify my advice with a few words of caution. It must be borne in mind, in the first place, that the large capitals of our main colonial towns such as Montreal, Melbourne, Sydney, etc., have Universities of their own, which are licensed to grant medical degrees upon their own account, and whose courses of instruction are permitted to count in any case as partially fulfilling the requirements demanded for graduation in our Universities at home. Moreover, it is not to be forgotten that colonists conceive that their own medical graduates are in possession of a better all-round education than those whose curriculum has been

completely taken out in this country, inasmuch as all colonial medical students are obliged, before entering upon their medical studies, to have passed at least a portion of their arts course. Again, colonial graduates have, of course, ties of interest with those among whom they have been brought up, which serve to give them a start in life, and place them at an advantage over the new comer. But in every colony there are always frontier settlements created by the onward march of the colonists in their haste to conquer the unoccupied soil. I have visited many places of this description in the great North-West of Canada, between the province of Ontario and the Pacific Ocean; towns which have sprung up as if by magic, and which, only a few years ago consisting of a handful of Indian wigwams, now contain from five to ten thousand inhabitants. The best colonial graduates stay in the large and older cities, but in the new border settlements (the particulars regarding such being easily obtainable from the different agents-general) there is abundant scope for medical practice. Of course colonial life has its drawbacks, including the necessary separation from the associations and friends of the old home; but I am confident that the young medical practitioner would in many cases find a far more fertile soil in the New World than in the old one, for the exercise of his profession, and the development of the talents entrusted to him.

Before passing from this subject I may remind you that medical appointments, to the number of 12 to 15 per annum, are from time to time filled up by the Colonial Office in London, for the following colonies, viz., Jamaica, Trinidad, British Guiana, the Windward

and Leeward Islands, British Honduras, Hong Kong, Fiji, Western Australia, West African Settlements, the Gold Coast, Cyprus, Ceylon, Gibraltar, St. Helena, and the Falkland Islands.

The majority of these appointments involve the medical charge of a district, including the supervision of its sanitation, and the care of a hospital, poor-house, asylum, or other Government institution. The salary commences at from £200 to £500 a-year, and rises after varying periods of service to £1200 and £1500. In almost all cases, private practice may be engaged in, and in some, periodical leave of absence is given, and a retiring pension is granted. As regards many of these Colonial Government appointments, the question of bodily health and vigour has a very important bearing. In Glasgow, as well as in many other parts of this kingdom, we constantly grumble about our miserable climate, and, doubtless, in this respect our patience is often sorely tried. But we may go further and fare worse. In many of these colonial stations, such as the Gold Coast, for example, the climate is exceedingly trying for Europeans, and especially for those of delicate constitution. Before, therefore, accepting any of these appointments, the practitioner should make himself aware of the climatic conditions of the district, so as to ascertain how far his bodily health may enable him to cope with them.

Mercantile Marine.—Amongst the temporarily useful courses open for general practice, are surgeoncies in the large shipping companies, such as the Peninsular and Oriental Company, the Cunard Company, the Anchor

Line, and many others; the particulars regarding which as to pay, rank, and the like, will be found in the appendix which I have drawn up for your information, particulars which I have taken some trouble to ascertain. The practitioner who fills one of these positions will have opportunities for seeing the material world, as well as sometimes the world of men. And to see the world thus may be of great use, for it widens a man's views of life, and now and then results in the formation of valued and lifelong friendships. There is, however, an attendant disadvantage in such a career; it creates in many an unsettled or a roving disposition, which is not conducive to settling down subsequently in private practice. Moreover, as retiring pensions are not granted by these shipping companies, a lengthened period of service as surgeon is not desirable.

Lady Doctors.—There is one source of competition which you will have to face, and from which your fathers and grandfathers in the profession were exempt. It is a competition which is still in its infancy, but it bids fair to attain to womanhood ere many years are over, and it is one the important bearing of which cannot be overlooked. The gentler sex have directed their first line of attack against the profession of medicine; and ungallant, indeed, would he be who refused to congratulate the plucky and indefatigable victors. Who knows how long the pulpit and the bar may be safe from attack? but, meanwhile, it is the medical citadel which has been stormed. Lady physicians, skilful and fully equipped, are within hail of all who need them. In America this medical female

progress is even more rapid and decided than in Europe; *e.g.*, three ladies (M.D.'s) are members of the clinical board at Philadelphia, and in that city there are eight lady physicians making incomes of 20,000 dollars each, twelve of 10,000 dollars, and twenty-two of 1,000 dollars.

This profane exploit of ambitious women entering the sacred precincts of the medical profession, has aroused the warmest antagonism within the charmed circle of regular male practitioners. It cannot be denied that there have been medical women from remote periods of antiquity. The professional mind, however, appears to be unable to contemplate with calmness the accomplished fact of actually existing female doctors, although its equanimity would not be disturbed by any historic portrait. It is not that the arguments against women undertaking medical practice are overwhelmingly strong, and that the supporters of female practitioners are perversely blind to their cogency,—for the arguments on the other side are not without force—but that there is something in the nature of the idea which carries away a certain section of the profession, and leads to a display of adverse feeling unsurpassed in intensity by any which is called forth by any other professional topic. Many of the most estimable members of our profession perceive in the medical education and destination of women, a horrible and vicious attempt on the part of women to deliberately unsex themselves in the acquisition of anatomical and physiological knowledge, the gratification of a prurient and morbid curiosity and thirst after undesirable information, and in the performance of routine medical and surgical duties, the assumption of offices

which nature intended exclusively for men. Hence the antagonists of medical women lose all patience over the discussion, and are incapable of arguing it out with any approach to calmness. The eminent physician who would rather follow his daughter to the grave than see her studying practical anatomy, forgets that he is not obliged to bring up his daughter to the medical profession, and that the fact that he would not allow his daughter to be medically educated, is no ground for preventing his neighbour from allowing his daughter to acquire knowledge and skill. It would be going too far in the opposite direction to charge the antagonists of medical women with trades-unionism; but this is a charge which unprofessional supporters of medical women might urge, and have urged, with some plausibility, because the effect is the same as if the trades-union spirit actually prevailed. I am very far from being in favour of a medical career for women, holding as I do, that by frame, temperament, and mental constitution, woman is not well adapted for medical, far less for surgical practice; but I do not think that the members of our profession should do more than exercise a private influence against the destination of young women to the medical profession. Medical practitioners have ample opportunities of supplying information concerning the nature of a medical student's career, the difficulties and dangers of the profession, and so of tempering this unfortunate enthusiasm. But it was never, I think, the office of our profession to lead the van of any crusade against the admission of women into our own ranks. Such opposition is sure to be decried as akin to trades-

unionism, and it is difficult to refute the charge, however untrue. We may honestly say that the opposition of our profession to the admission of women is disinterested, and is solely to prevent injudicious women from embarking on a course which must prove injurious to them. As to the wisdom or folly of women adopting medicine as a profession, let women themselves be the judges. So long as they content themselves with schools of their own, and desist from clamouring for that abomination, viz., mixed classes, we have no ground for complaint, but should rather wish them God speed. Apart from the study of medicine, the intellectual progress made by women in recent years has been very great. It is but a few months since the University of Cambridge furnished a brilliant example of this in the person of Miss Ramsay; and the results of the recent London University Examinations show some striking figures. For the Matriculation Examination there were 1100 candidates—*i.e.*, 150 women and 950 men. Out of these, 100 women and 515 men passed—*i.e.*, two-thirds in the one case, and little more than one-half in the other. Nor is this all, for in the honour list one-fifth were women, while one-ninth were men. Facts of this kind must speak for themselves, as evidence that the new *regime* is bearing fruit. If it be the destiny of woman in any degree to regenerate the coming age, and to infuse into a race yet unborn a nobler, more gracious, and less sordid spirit than that of the present era, there is but one pathway to success. Women must win their way, maintain and hold it, dauntless to the end—not by trying to become men, but by remaining more than ever

women in the truest sense—by self-respect, discipline, and self-restraint; by search for the truth; by purity of aim; by faith in all goodness; and by the radiance of a spotless life. The fight may be no easy one, but the victory will be certain. If they need encouragement by the way, let them take it from the lips of the Poet Laureate—

“ Work out your freedom, girls.
Knowledge is now no more a fountain sealed;
Drink deep! until the habits of the slave,
The sins of emptiness, gossip, and spite,
And slander die.”

I have endeavoured to lay before you, gentlemen, the principal lines in which your lots are to be cast, in the event of your adhering to your present intention of following the medical profession as your avocation for life. The choice of the particular department which you would prefer must be made by each one for himself; and in the selection you should be guided, not only by the strength of your body and of your purse, but also by the inward conviction that in this or that medical sphere, which you have deliberately chosen, you will contribute most to the health and happiness of your fellow-men. Do not be selfish in your choice, but be mainly swayed by the consideration that your mission in life is to lessen the misery and suffering of the greatest possible number; to ward off disease as well as to check it when it appears; to minister to a body, and often to a mind, diseased; to soothe the pains that afflict the anguished frame; to uplift the downcast spirit; to “husband out life’s taper at the close, and keep the flames from wasting;” to lengthen, under

Providence, the period of human life, and to slacken the footsteps towards that "undiscovered country from whose bourne no traveller returns"—surely these are objects worthy of the loftiest minds! You have chosen a noble profession—noble in its aims; noble, from the long roll of illustrious men on whose memories a glorious halo will ever rest; and noble, from its many victories in the eternal warfare it wages against disease and death. The inheritance which is thus bequeathed to you is one of no ordinary kind; in comparison with it mere wealth and fortune are as dust in the balance. The blessings which have been conferred upon the human race by such men as Jenner, Ferguson, Simpson, Lister, and many others, have been sanctified by the thanksgivings of hundreds of thousands whose sufferings have been lessened by their benign influence. Upon you devolves the responsibility of carrying out the noble aims which their genius has achieved, and of winning fresh victories in the domain of the healing art. Keep therefore, I warn you, your minds ever awake, your eyes ever open, and your ears ever on the alert; so that, perchance, it may be vouchsafed to some of you to uplift the filmy veils behind which some of nature's most important medical facts and laws are no doubt still tantalizingly masked.

In striving to carry out your divinely-inspired mission with honesty of purpose and with the golden rule for your guide, do not be discouraged although all men should not speak well of you. You have heard the story of the painter of olden time, who exposed his picture to public criticism, and left a paint-brush close at hand so that anybody might blot out any particular

feature of which he disapproved. Of course, the ingenuous artist soon found that everybody had some fault to find; and, bit by bit, his unfortunate picture was totally obliterated. Just as it was with the picture, gentlemen, so is it with the life-work of the majority: somebody will be pretty sure to take a crooked and distorted view of your character and of your actions, however meritorious they may be; some will do this wilfully and maliciously, and others through misunderstanding. But good, honest, persevering work in any sphere of duty will assuredly win its way in the end, and bring with it its own exceeding great reward.

“On active worth the laurel War bestows;
Peace rears her olive for industrious brows;
Nor Earth, uncultured, yields its kind supplies,
Nor Heaven its showers, without a sacrifice.”

The aphorism of the Father of Medicine, written upwards of 2,000 years ago, still holds true—“Life is short and the art long.” The span of life allotted to each of us is too long if it be devoted to the pursuit of evil ways, and too short if our object be to follow in the right path, and to leave even a single “footprint on the sands of time.” “The golden moments in the stream of life rush past us, and we see nothing but sand; the angels come to visit us, and we only know them when they are gone.” Avail yourselves, then, of all the opportunities which may be offered to you, not only during the rest of your curriculum, but in your professional life, of acquiring knowledge and of doing good to your fellow-men. If you allow these opportunities to slip, they will pass from you beyond recall. Ere many years are passed, you, like the rest of us, will be

called upon to give an account of your stewardship; and, assuredly, the members of the healing art will be amongst those to whom ten talents have been given. If you use these aright—and you will have ample opportunities of doing so—you will not fail to be numbered amongst the good and faithful; but if you fail to turn them to good account, you will richly deserve the title of unprofitable servants.

“Rouse,” then, “to this work of high and holy love,
 And thou an angel’s happiness shall know;
 Shalt bless the earth while in the world above;
 The good begun by thee shall onward flow
 On many a branching stream, and wider grow;
 The seed that, in these few and fleeting hours,
 Thy hands, inspiring and unwearied, sow,
 Shall deck thy grave with amaranthine flowers,
 And yield thee fruits divine in heaven’s immortal bowers.”

APPENDIX.

REGULATIONS IN THE ARMY, THE INDIAN ARMY, AND THE ROYAL NAVY.

REGULATIONS RELATING TO COMPETITIVE EXAMINATIONS FOR
COMMISSION AS SURGEON IN HER MAJESTY'S SERVICES,
AND COMMON TO THE ARMY, THE INDIAN ARMY, AND THE
ROYAL NAVY.

Candidates for the Army and the Navy must be British subjects of unmixed European blood.

Candidates for the Indian Medical Service must be natural born subjects of Her Majesty.

The Candidate must be doubly qualified and registered, of sound bodily health, of good moral character, duly certified to, and having no disability likely to unfit him for service in any climate he may have to do duty in. This will be verified by a medical examination. He must not be over 28 years of age, unless, in the case of the Army, he enter for service on the West Coast of Africa.

He will have to pass an examination in—

Anatomy and Physiology.

Medicine, including Therapeutics, and the Diseases of Women and Children.

Surgery, which will also include operations upon the dead body, and the application of apparatus.
(Partly practical at the bed-side.)

Chemistry and Pharmacy, with practical knowledge of Drugs.

The Competitors are arranged according to merit in passing this examination, and the selection of Candidates is made accordingly. Then there is an optional examination of the successful Candidates in French, German, Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with special reference to *Materia Medica*—Hindustani is added for the Indian Army; and in proportion to success in passing this examination, is the Candidate's position improved.

Successful Candidates for the Army and for the Indian Medical Service then undergo a course of study of not less than four months at Netley, upon—

1. Hygiene.
2. Clinical and Military Medicine.
3. Clinical and Military Surgery.
4. Pathology of diseases and injuries incident to Military Service.

Successful Candidates for the Navy receive at once their Commissions as Surgeons, and go to Haslar Hospital for the study of Hygiene and for hospital work. The time spent in study at Netley and at Haslar reckons as Service in computing pension, and the pay is 8s. per diem.

REGULATIONS RELATING TO H.M. ARMY.

One-half, at least, of the vacancies for Commissions are to be filled by public competition, and the remainder from nominations by the governing bodies of public schools of medicine in the United Kingdom and the Colonies.

The "Surgeon on Probation" on leaving Netley gets his Commission as—

SURGEON, with a pay of £200 per annum.

After 5 years' service his pay is £250 per annum.

After 10 years' service his pay is 15s. per diem, and if he now retire from the Service, he receives a gratuity of £1,250; but remaining, he may be promoted to

SURGEON-MAJOR, at a pay of £1 per diem, which is increased by length of service until it reaches £1 7s. 6d.; but when at headquarters, at a pay of £650 per annum.

After 15 years' service his pay is £1 2s. 6d. per day; or he may retire with a gratuity of £1,800, and

After 18 years' service with one of £2,500.

After 20 years' service he receives as pay £1 5s. per diem ; but he may retire at a pay of £1 per diem ; or remaining in the Service, he has the chance of being selected for ability and merit as a BRIGADE-SURGEON.

After 25 years' service, if he have spent 8 years' service abroad as a Surgeon-Major, his pay is £1 7s. 6d. per diem, and the retired pay £1 2s. 6d.

After 30 years' service the retired pay is £1 5s. per diem.

The BRIGADE-SURGEON'S pay at first is £1 10s. daily ; after 5 years in the rank, £1 13s. Officers in this and the previous ranks retire at 55 years of age. Permanent half-pay—

Under 30 years' service, £1 7s. 6d. per diem.

After 30 years' service, £1 10s. per diem.

The DEPUTY SURGEON-GENERAL is selected for ability and merit from Brigade-Surgeons who have served at least 10 years abroad, including three in India. Pay, £2 a day. At head-quarters, £900 annually. Retires at 60. Permanent half-pay, £1 15s. per diem.

The SURGEON-GENERAL is selected in the same way from Deputy Surgeons-General. His pay is £2 15s. per diem. At head-quarters, £1,300 yearly. Retires at 60. Permanent half-pay, £2 per diem.

REGULATIONS RELATING TO THE INDIAN MEDICAL SERVICE.

The "Surgeon on Probation" on leaving Netley gets his Commission as—

SURGEON, with a pay of 10s. per diem, which upon embarkation he receives for two months in advance. On board the troopship he pays 2s. per diem for mess.

	Rs. per month.
On arriving in India his pay is - - -	286 10 0
and he must subscribe to the Indian Service Family Pension Fund. If he be placed in charge of a Native regiment his pay is Rs. 450.	

After 2 years' regimental duty in India, the Surgeon is eligible for civil employment.

	Rs. per month.
After 5 years' service his pay in India is -	304 14 2
If placed in charge of a Native regiment	

his pay is Rs. 600. One year's furlough is allowed after each five years' service in India, and these furloughs reckon as "service" in computing pensions.

	Rs. per month.
After 6 years' service his pay in India is -	392 5 2
„ 10 „ „ „	410 9 5
„ 12 „ „ he is promoted to SURGEON-MAJOR, and his pay in India is -	640 14 6

If placed in charge of a Native regiment his pay is Rs. 800.

After 15 years' service his pay in India is 677 6 11

After 17 years' service for pension, the retiring allowance is £292 per annum.

After 20 years' service for pension, the retiring allowance is £365 per annum.

After 25 years' service for pension, the retiring allowance is £500 per annum.

	Rs. per month.
After 20 years' service his pay in India is -	852 3 7

If placed in charge of a Native regiment his pay is Rs. 1000. He is eligible now for promotion, and, if selected for ability and merit, he becomes

BRIGADE-SURGEON, and if in charge of a Native regiment, he receives Rs. 1,000 per month.

But whether the Surgeon-Major be promoted or not, his pay in India after 25 years' service is - - - - -

888 12 0

After 30 years' service for pension, the allowance is £700 per annum.

The next promotion from Brigade-Surgeon is by selection for ability and merit to—

DEPUTY SURGEON-GENERAL, who receives Rs. 1,800 per month. After 5 years, he may retire upon a pension of £250 in excess of that mentioned above.

The next promotion is by selection for ability and merit to—

SURGEON-GENERAL, who ranks as Major-General. His pay in Bombay and Madras is Rs. 2,500 per month, and in Bengal Rs. 2,700.

After 5 years, he may retire upon a pension of £350 in excess of that mentioned above.

REGULATIONS RELATING TO THE ROYAL NAVY.

This Service is composed of 400 Surgeons, Staff-Surgeons, and Fleet-Surgeons, 12 Deputy Inspectors-General and 4 Inspectors-General of Hospitals and Fleets. All these have cabins according to their rank and their duties. The last two grades *must* retire at 60 years of age; the others at 55. In all the grades, retirement takes place if the officer be found physically unfit for the Service, or if he have not served for 5 years. Officers on retirement have special considerations as regards appointments in the Admiralty.

Full-Pay Service.—The Surgeon, on leaving Haslar gets his commission as SURGEON, and a daily pay of 11s. 6d., increasing 2s. after 4 years spent in full-pay service, and another 2s. after 8 years. Should he *now* retire he is entitled to a gratuity of £1,000. If he retire earlier, his gratuity is not to exceed £125 for each year of full-pay service.

The half-pay commences at 6s. per diem, increasing 1s. after every two years of full-pay service, until 11s. per diem is reached.

After 8 years, if an examination be passed, promotion to STAFF-SURGEON takes place at 12 years. A Staff-Surgeon's pay is £1 1s. per diem; and after 4 years' full-pay service £1 4s. Retiring gratuity is at first £1,500, and after the 4 years £2,250. The half-pay is at first 12s., increasing 1s. after every 2 years' full-pay service up to 15s.

After 20 years' full-pay service, promotion to FLEET-SURGEON may take place at a pay of £1 7s. per diem; after 4 years' full-pay service £1 10s.; and after 8 years' full-pay service £1 13s. The half-pay is 17s. per diem, increasing 1s. after every 2 years' full-pay service up to £1. The retired pay is at first £1 per diem, after 4 years' full-pay service £1 2s. 6d., after 7 years £1 5s., and after 10 years £1 10s., the same pay being granted on retirement at age of 55. A Fleet-Surgeon ranks as Brigade-Surgeon in all matters wherein the Army is concerned.

The DEPUTY INSPECTOR-GENERAL is selected for ability and merit from Fleet-Surgeons, and receives £2 2s. per diem. An INSPECTOR-GENERAL receives £2 15s., and is selected from Deputy Inspectors-General of 3 years' foreign

service, or 4 years' mixed service, 2 of which have been abroad, or of 5 years' home service, if there has been no refusal to go abroad. He is entertained at the Captain's table. The half-pay of Deputy-Inspector commences at £1 5s., and after each 2 years' full-pay service, an increase of 2s. up to £1 9s. The half-pay of Inspectors-General is £1 18s. On retirement the "Deputy" receives £1 15s., and the "Inspector-General" £2 per diem.

Provision is made for earlier promotions in distinguished cases.

MEDICAL APPOINTMENTS IN THE MERCANTILE MARINE SERVICE.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

OFFICES:—122 LEADENHALL STREET, LONDON.

The vessels of this Company connect Great Britain with India, China, and Australia, *via* the Mediterranean and Suez Canal, by means of a fleet of 51 steamships of a tonnage between 1,835 and 5,013.

The surgeons must be between 23 and 30 years old, and have taken a degree in medicine of some British University or hold the double qualifications, and must sign an agreement to serve for two years on any of the Company's lines. Pay, £10 per month. Position about equal to that of a chief officer. Surgeon provides himself with uniform and such instruments as are indispensable. Medicines and cabin furniture found by Company. Meals taken in saloon with passengers.

BRITISH INDIA STEAM NAVIGATION COMPANY, LIMITED.

OFFICES:—13 AUSTIN FRIARS.

Vessels sail from London for Kurrachee, Bombay, Calcutta, and the principal ports in India, Burmah, Persia,

and East Africa, touching at Algiers, Malta, Suez, Aden, Colombo, Madras, &c. Voyage out and home in three months. Salary, £8 per month. Surgeon ranks as a superior officer, and provides instruments and uniform. Ship finds drugs.

CITY LINE.

OFFICES:--36 GRACECHURCH STREET, LONDON.

Owners, Messrs. Geo. Smith & Sons, 45 West Nile Street, Glasgow.

Steamers sail from Glasgow and Liverpool for Calcutta, a voyage of three months, both ways. They only call at Suez Canal ports, except for coaling purposes. Salary, £5 per month. No uniform; instruments and drugs provided by ship. Position of surgeon that of an "officer and gentleman."

DUCAL LINE OF STEAMERS.

Messrs. McDiarmid, Greenshields & Co., 112 Fenchurch Street.

Sail from London to Calcutta, calling at Port Said, Suez, Colombo, and Madras. Voyage out and home takes $3\frac{1}{2}$ months. Salary of surgeon, £6 10s. per month. He ranks as an officer of the first class. Ship provides drugs and appliances. The surgeon finds instruments. No uniform worn.

Sometimes this line sends steamers to Queensland with emigrants. In these cases the pay of the surgeon is £8 per month, with 2s. 6d. per emigrant landed.

THE "STAR" LINE OF STEAMERS.

Rathbone Brothers & Co., 21 Water Street, Liverpool.

Each vessel is of about 4,000 tons burden, and one sails about every four weeks from Liverpool to Calcutta, calling at Port Said, Suez, and Colombo. Voyage out and home takes three months. Salary, £10 per month.

Surgeon ranks after chief officer. Ship finds drugs; the surgeon finds instruments. Uniform optional, but cap and buttons must be worn, and the surgeon finds them.

OCEAN STEAMSHIP COMPANY.

Alfred Holt, Esq., 1 India Buildings, Water Street,
Liverpool.

Steamers sail about every week from Liverpool to China, a four months' voyage. Pay, £10 and £8 a month, with gratuity for satisfactory conduct. No uniform. The Company provides medicines, &c.; the surgeon must be in possession of the surgical instruments required. Application to the Medical Superintendent.

ROYAL MAIL PACKET SERVICE.

OFFICES:—18 MOORGATE STREET, LONDON.

J. M. Lloyd, Esq., Secretary.

Vessels sail between Southampton and the West Indies. Surgeon must be between 22 and 40 years old, and constitutionally fit for the service. Salary at entry, £120 while on duty at sea, and after three years' service £150. Surgeon is provided with a private sleeping cabin, bedding, towels, mess utensils, and other necessities, and messes in the saloon with the passengers, the captain, and other officers. With application, testimonials for whole period of professional career to be sent, and certificate of moral conduct from a clergyman.

THE UNION STEAMSHIP COMPANY.

OFFICES:—11 LEADENHALL STREET, LONDON, AND
ORIENTAL PLACE, SOUTHAMPTON.

This Company possesses a fleet of 15 steamships, their tonnage varying from 4,600 to 2,000 tons, and sail between Southampton or Plymouth and the Cape of Good Hope and Natal.

On the way to and from the Cape all ships call at

Madeira, and St. Helena and Ascension are called at at stated intervals, Ascension only homewards. Voyage to Cape takes about 21 days, to Natal about 27. Surgeon's pay at sea is £10 per month.

SHAW, SAVILE & ALBION COMPANY.

OFFICES:—34 LEADENHALL STREET, LONDON.

Steamers sail from London to various ports in New Zealand, touching at Teneriffe or Cape Town and Hobart on way out, and at Rio on way home. Voyage each way takes 40 to 45 days. Salary of surgeon, £10 per month. Company finds drugs, the surgeon finding instruments and his uniform.

INMAN LINE OF STEAMSHIPS.

OFFICES:—TOWER BUILDINGS, WATER STREET, LIVERPOOL.

Ships sail from Liverpool (calling at Queenstown) for New York. Voyage out $9\frac{1}{2}$ days, returning in same time, a week intervening in New York. Salary, 6s. per day, and when at sea 1s. per diem wine money. Surgeon finds uniform; the Company finds instruments and drugs. Ranks with purser and navigating officers, but position independent. Hard to procure appointment. Surgeons remain long in the service.

WHITE STAR LINE.

OFFICES:—10 WATER STREET, LIVERPOOL.

Ships sail from Liverpool, calling at Queenstown on way to New York. Voyage out and home in 28 days. Salary, £10 per month. Uniform provided by surgeon. Instruments and drugs by Company. Position independent, but subordinate to commander.

BEAVER OR LAKE LINE OF STEAMERS.

OFFICES:—32 DRURY BUILDINGS, 21 WATER STREET,
LIVERPOOL.

Ships sail from Liverpool for Quebec and Montreal in summer, and for New York in winter. Voyage out and

home in five weeks. Salary, £8 per month, Uniform provided by surgeon, who ranks with chief officer. Ship finds drugs and instruments.

DOMINION LINE.

Messrs. Flinn, Main & Montgomery, Harvey Buildings,
24 James Street, Liverpool.

Run steamers from Liverpool every Thursday to Canada, carrying first-class passengers as well as intermediate and steerage. Cabin capacity of their steamers ranges from 36 to 220 berths.

Surgeons are engaged for the voyage at £8 per month. They rank as officers. Uniform not required. The Company find all instruments and drugs.

ALLAN LINE OF MAIL STEAMERS.

Messrs. James & A. Allan, 70 Great Clyde Street,
Glasgow.

Vessels sail from Glasgow for Quebec, Boston, and Philadelphia. Voyage out and home occupies 35 days. At busiest season have 13 surgeons attached to their Canadian and South American fleet of steamers. They are mostly young men, generally just commencing their professional career. They receive a salary of £7 per month, and mess along with the other officers. There is no promotion, no pension, and when any one retires another is got to fill the vacancy. The number of new appointments annually can hardly be stated correctly, as it depends entirely on the number who resign.

CUNARD LINE.

OFFICES:—8 WATER STREET, LIVERPOOL.

Steamers sail from Liverpool (calling at Queenstown) for New York every Saturday, or for Boston every Wednesday. Average passage to New York, seven days; Boston, nine days.

Surgeons.—Number: nine to twenty, according to season and number of passengers. Age for admission: 25 years, if certified by the Board of Trade. Period of service: a few months to 20 years. Amount of leisure: fully half their time during a voyage, all their time when in this country. Promotion, if any: only from a small to a large vessel. Pay and allowances: 6s. 6d. per day; if attending a cabin passenger, fee and amount of it optional with passenger. Status: surgeon, authority only over cases of sickness. Mess: in saloon. Retiring pension: none. Number of applicants on list: 75. Number of new appointments annually: 4 to 7.

The pay, 6s. 6d. per day, is continuous.

There are a great number of applications, but only those who are considered suitable are put on the list.

The new appointments annually vary very much, and it is difficult to give an average.

ANCHOR LINE.

Messrs. Henderson Brothers, 47 Union Street, Glasgow.

The Anchor Line of steamers carry surgeons on all vessels employed in the passenger service.

This Company's services are as follows:—Glasgow to New York; Liverpool to New York; Mediterranean to New York; Liverpool to Bombay; Liverpool to Calcutta.

During 1886 there were employed (at one time) in the vessels of this line about 30 medical officers. The appointments are made in Glasgow, and the vacancies may average two each month. The average duration of each medical officer's service varies according to the trade in which the vessel is engaged. In the Indian service medical men do not stay longer than 6 or 9 months. In the other trades the average time is over 12 months. When two years is reached it may be taken that the surgeon prefers the sea to following his profession ashore, for health reasons, &c.

Conditions of Appointment:—Surgeons must be qualified and registered. Salary varies from £6 to £10 per month, according to the service in which the officer is engaged. There is no retiring allowance or pension. (This is not called for, as medical men do not go to sea with the view of remaining there for any length of time.)

“ORIENT” STEAM NAVIGATION COMPANY,
LIMITED.

Messrs. F. Green & Co., and Messrs. Anderson, Anderson
& Co., Fenchurch Street, London.

Ten steamers are normally employed in the service. One medical officer to each steamer.

Age for admission: about 25 years. Period of service: at least two round voyages (say 19 months) subject to pleasure of Board of Management. Leisure: about 14 days in England on return from the voyage, and a few days in Australia, the latter subject to leave of captain, and a satisfactory substitute being provided free of cost to the ship. Promotion: none. Pay: £10 per month. Allowances: none. Status: a principal officer of the ship under the captain. Surgeons have to sign articles in London for each round voyage. Mess: first saloon, same as captain and other officers. Retiring pension: none. Number of applicants: from 800 to 1,000. Number of new appointments annually: 6. Principle of selection: all appointments are made by the Board of Managers after a personal interview, preference being given to those candidates who possess the highest qualifications, and who have successfully held resident appointments such as House Physician or House Surgeon to a large Hospital or Infirmary.

Medical officers of the “Orient” Line sometimes settle in Australia, or obtain appointment as emigrant doctors, the latter being made by the Emigration Board in the colony. The surgeon of one of the New South Wales emigrant ships is paid about £300 per voyage, and it is not unusual to make 3 voyages per annum.

Population as Ascertained by Census.

	1851	1861	1871	1881
England and Wales, -	17,927,609	20,066,224	22,712,266	25,974,439
Scotland, -	2,888,742	3,062,294	3,860,018	3,735,573
Ireland, -	6,574,278	5,798,967	5,412,377	5,174,836
United Kingdom, -	27,745,949	29,321,288	31,845,379	35,269,483
Isle of Man and Channel Islands,	143,126	143,447	144,638	141,791
Soldiers and Sailors Abroad, -	212,194	250,356	216,080	242,844

Number of (Male) Medical Practitioners as Ascertained by Census.

	1851	1861	1871	1881	Med. Register, 1887, Number of Practitioners
ENGLAND AND WALES, -	19,190	17,981	17,800	15,091	17,112
SCOTLAND—					
Physicians, -	511	Physicians and Surgeons, } 1870	Physicians and Surgeons, } 1761	Physicians and Surgeons, } 1874	
Surgeons, -	1576	Med. Student Assistants, } 1199	Med. Student Assistants, } 1180	Med. Student Assistants, } 2335	
Other Medical Men, -	923				
Total, -	Total, 3010	Total, 3069	Total, 2941	Total, 4209	5023
IRELAND—					
Physicians, -	1223	Physicians, Surgeons, } 1604	Physicians, Surgeons, } 753	Physicians, Surgeons, } 753	
Surgeons, -	1216	Apothecaries and their Assistants, } 419	geons, &c., including 27 under 20 years of age, } 27	geons, and General Practitioners. } 4317	
Apothecaries, -	648	(Including 95 under 20 years of age, } 5			
Total, -	Total, 3087	Total, 2781	Total, 2420	Total, 2470	4317

Average Number of Persons to One Medical or Surgical Practitioner in 1881.

ENGLAND.			SCOTLAND.		
London, - -	959		Glasgow and 9 } Burghs, - }	2,013	
Brighton, - -	692		Edinburgh, -	784	
Portsmouth, -	1,807		Dundee, - -	4,347	
Norwich, - -	2,201		Aberdeen, -	1,479	
Plymouth, - -	1,275		Greenock, -	2,995	
Bristol, - -	2,276		Paisley, - -	3,709	
Wolverhampton, -	2,301		Leith, - -	2,780	
Birmingham, -	1,683		Perth, - -	1,239	
Leicester, - -	2,238				
Nottingham, -	2,541				
Liverpool, - -	1,481				
Manchester and } Salford, - - }	1,802				
Oldham, - -	3,205				
Bradford, - -	2,556				
Leeds, - -	3,074				
Sheffield, - -	2,505				
Hull, - - -	2,015				
Sunderland, -	2,289				
Newcastle-on-Tyne,	1,156				